Corrector Prototype Beamline Test Planning and Status
June 8, 2007 1:00 pm
Craig Drennan

Introduction:
As mentioned in the previous minutes, we are planning to do a pre-shutdown installation and full power test of a new corrector package into the booster. This would test not only the corrector package but all of the other associated power supplies and controls.

We hope to have everything in place by July 13, 2007

This weeks meeting discussed the issue of supplying AC power to the power supply racks. We also got more focus on which dates the installation shutdowns should be and what installation tasks should be done on these dates. The minutes of the previous meetings can be found in the AD Document Database as Beams-doc-2792.

Please send any additions or corrections to these minutes to cdrennan@fnal.gov.

Those in attendance:
Eric Prebys, Craig Drennan, Jim Ranson, Joel Misek, Kent Triplett

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Next Meeting: June 15, 2007, 1:00 pm in the Penthouse West Booster Tower
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21. In order to make the "final" 480 VAC connections for the West Tower corrector power supply racks we will need to shutdown power to a significant portion of the Booster systems. This worried many people concerned with losing beam time for the experiments in these final weeks before the shutdown. Jim Ranson offered an alternate means of supplying AC power. We will us a temporary portable transformer and panel board for providing four 120 VAC circuits, and a 480 to 480/277 transformer is being procured to provide the 480 VAC with a neutral. Using this equipment connected to a welding recepticle the AC can be provided to the racks without a power outage and would not need to wait for a shutdown.

22. We will need a "supervised shutdown", to occur sometime between June 18 and June 22 in order to run the magnet power cables. This is expected to take 4 hours.

23. In order to complete the prototype installation we will need a second 8 hour shutdown between July 9 and July 13 to accomplish the following tasks:

    a. Put in place a corrector package on a temporary stand with the final adjustment plate, to the side of the Booster beam line.
    b. Connection of the corrector package into the beam line / Booster vacuum
    c. Connect the magnet power cables to the corrector package.
    d. Connect the corrector to the LCW cooling water.

e. Connect the BPM to the existing signal cables at Period 4.
f. Perform an alignment using the new adjustment plate and corrector alignment fixtures.

24. Component availability for the installation had a few status updates.
    a. The in-house built BPM's will come a couple days later than previously reported, June 15.
    b. All of the components needed for the LCW connection are in hand.
    c. Also the requirement for a power outage was replaced by the need for the temporary transformer and panel board.
    d. The HRM Chassis and VME Crate and modules will be tested in Mike Kucera's shop before coming over to be installed. Mike has requested some IP addresses and some communication cable needs to be pulled.

25. Joel Misek noted that the installation of the corrector package at Long 4 will include a local vacuum roughing pump port included with the BPM assembly. This will accommodate a hand roughing station to pump down this section before valves are open.

Components we will need for the test.

__X__ Corrector Package.
Available

_____ Beam Position Monitor with bellows and flanges (fabricated in-house)
Current Estimate: June 15, 2007

_____ Corrector stand with adjustment plate assembly
Current Estimate: June 25, 2007

__X__ Power cables for magnets (including cable for Klixon)
Available

__X__ Cable tray for West Tower
Available

__X__ AC power disconnects, conduit, power strips, etc.
Available

_____ Power transformer and panel board for final AC hook-up.
Current Estimate: June 15, 2007

__X__ Components needed for the LCW connection.
Available

_____ 4 each 40 Amp Switch Mode Power Supplies.
Current Estimate: June 29, 2007

_____ 1 each 65 Amp Switch Mode Power Supply.
Current Estimate: June 29, 2007

_____ 1 each 2 Amp Switch Mode Power Supply.
Current Estimate: July 9, 2007

_____ Bulk power supply built in rack.
Current Estimate: June 15, 2007

_____ HRM Chassis and VME Crate and modules installed with ACNET Devices
Current Estimate: June 22, 2007

_____ CAMAC Crate and crate controller installed in rack.
Current Estimate: June 20, 2007

_____ Six C473 Ramp Cards installed with ACNET devices assigned.
Current Estimate: June 20, 2007

_____ Local cable assemblies for power supply control and status.
Current Estimate: June 27, 2007